



Fig. 2. Dose response of the four anthelmintics is shown. Here, the percentage response is obtained by calculating the average centroid velocity of a worm population at a certain drug concentration and normalizing it to the velocity from the control experiments with M9 buffer. The EC_{50} (that is, drug concentration where the percentage response is 50%) values obtained from our microfluidic device are as follows: levamisole, 2.23 mM; pyrantel, 107.5 mM; tribendimidine, 4.68 mM; and methyridine, 1672 mM. Each drug concentration is tested on at least three separate chips with one worm per chamber and three chambers per chip.